

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Arslan, Aslıhan; Reicher, Christopher Phillip

# **Conference Paper**

The Effects of the Coffee Trademarking Initiative and Starbucks Publicity on Export Prices of Ethiopian Coffee

Proceedings of the German Development Economics Conference, Hannover 2010, No. 22

# **Provided in Cooperation with:**

Research Committee on Development Economics (AEL), German Economic Association

Suggested Citation: Arslan, Aslıhan; Reicher, Christopher Phillip (2010): The Effects of the Coffee Trademarking Initiative and Starbucks Publicity on Export Prices of Ethiopian Coffee, Proceedings of the German Development Economics Conference, Hannover 2010, No. 22, Verein für Socialpolitik, Ausschuss für Entwicklungsländer, Göttingen

This Version is available at: https://hdl.handle.net/10419/39959

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





Kiel

# **Working Papers**



The Effects of the Coffee
Trademarking Initiative and
Starbucks Publicity on Export
Prices of Ethiopian Coffee

Aslıhan Arslan and Christopher P. Reicher

No. 1606 | March 2010

Web: www.ifw-kiel.de

Kiel Working Paper No. 1606 | March 2010

Title: The Effects of the Coffee Trademarking Initiative and Starbucks Publicity on Export Prices of Ethiopian Coffee

Author: Aslıhan Arslan and Christopher P. Reicher

Abstract: The Ethiopian government initiated the Ethiopian Coffee Trademarking and Licensing Initiative in 2004 for three coffee origins: Sidama, Yirgacheffe and Harar. Following a court case between Starbucks and the Ethiopian government regarding this initiative, Oxfam organized a publicity campaign. This paper evaluates the effect of these interventions on the export prices of trademarked Ethiopian coffees. We find that the prices of the trademarked coffees increased by about 10\% following these interventions. The magnitude of this change is comparable with the farm gate prices reported in the literature; however, we cannot establish direct causation or observe the passthrough into farm gate prices.

Keywords: Trademarks, Coffee Prices, Public Campaign, Oxfam, Starbucks, Ethiopia

JEL classification: O13, F14

#### Aslıhan Arslan

Kiel Institute for the World Economy 24100 Kiel, Germany Telephone: (431) 881 4499

E-mail: aslihan.arslan@ifw-kiel.de

# **Christopher P. Reicher**

Kiel Institute for the World Economy 24100 Kiel, Germany Telephone: (431) 881 4300

E-mail: christopher.reicher@ifw-kiel.de

\* The fieldwork for this research has been funded by the Poverty, Equity and Growth Network (PEGNet) at the Kiel Institute for the World Economy. The support is greatly appreciated.

The responsibility for the contents of the working papers rests with the author, not the Institute. Since working papers are of a preliminary nature, it may be useful to contact the author of a particular working paper about results or caveats before referring to, or quoting, a paper. Any comments on working papers should be sent directly to the author.

Coverphoto: uni\_com on photocase.com

# THE EFFECTS OF THE COFFEE TRADEMARKING INITIATIVE AND STARBUCKS PUBLICITY ON EXPORT PRICES OF ETHIOPIAN COFFEE

# ASLIHAN ARSLAN♣, CHRISTOPHER REICHER♠

ABSTRACT. The Ethiopian government initiated the Ethiopian Coffee Trademarking and Licensing Initiative in 2004 for three coffee origins: Sidama, Yirgacheffe and Harar. Following a court case between Starbucks and the Ethiopian government regarding this initiative, Oxfam organized a publicity campaign. This paper evaluates the effect of these interventions on the export prices of trademarked Ethiopian coffees. We find that the prices of the trademarked coffees increased by about 10% following these interventions. The magnitude of this change is comparable with the farm gate prices reported in the literature; however, we cannot establish direct causation or observe the passthrough into farm gate prices.

# INTRODUCTION AND BACKGROUND

Coffee is one of the most valuable agricultural commodities traded in international markets and Ethiopia is the birthplace and the primary center of diversity of Arabica coffee (Daviron & Ponte, 2005; Labouisse *et al.*, 2008). Ethiopia produces around 5% of world production and more than 30% of the total production in Sub-Saharan Africa (ICO). Besides the cultural importance, coffee has an important place in Ethiopian economy because it provides 35% of the total export earnings (CSA, 2008). Ninety five percent of the total

Date: March 23, 2010.

Key words and phrases. Trademarks, Coffee Prices, Public Campaign, Oxfam, Starbucks, Ethiopia. JEL Code: O13, F14.

The fieldwork for this research has been funded by the Poverty, Equity and Growth Network (PEGNet) at the Kiel Institute for the World Economy. The support is greatly appreciated.

A Poverty Reduction, Equity and Development Group, Kiel Institute for the World Economy, Kiel, Germany. E-mail:aslihan.arslan@ifw-kiel.de

Monetary Policy under Market Imperfections Group, Kiel Institute for the World Economy, Kiel, Germany.

coffee output is produced by over one million small-scale producers and more than 10 million Ethiopians belong to the coffee value chain directly or indirectly (Bastin & Matteucci, 2007).

The Ethiopian government took a bold step based on intellectual property rights to control the value chain and to protect the names of its high quality coffees. In 2004 the Ethiopian Intellectual Property Office (EIPO) collaborated with Light Years IP, a development group based in Washington DC, to create a system that would capture more of the retail value of Ethiopia's fine coffees within the country. The result was The Ethiopian Coffee Trademarking and Licensing Initiative led by the EIPO in conjunction and consultation with the Ethiopian Fine Coffee Stakeholder Committee that consists of growers, small traders, exporters, cooperatives and local development bodies (Ethiopian Coffee Network, ECN (2009)). Within this framework, Ethiopia is registering trademarks in foreign markets for three fine coffee types: Yirgacheffe, Sidama, and Harar, and then licensing importers and others involved in the distribution of these coffees for the use of these terms. Twenty-nine countries had signed the Trademark and Licensing Initiative as of August 2009 (Belete, 2009).

The goal of this Initiative is to de-commodify Ethiopian fine coffees and de-link their price from the New York Exchange based price for Arabica coffee. The signatories enter into a brand management strategy with the government and public promotions. All companies that want to promote these will need a license (ECN, 2009). Although the licenses are royalty free, the Ethiopian government expects the brand management strategy to increase global demand for specialty coffees and create wealth in the long run (Kurata, 2008). Trademarks are also expected to give the government more leverage in managing the whole supply and distribution chain and increase the share that farmers receive from the retail coffee price.

The road to successful registration of trademarks in some countries, however, was not smooth. In 2005, the Ethiopian government filed applications in the US to register all three names as trademarks. At that time, Starbucks had already an ongoing application to register the name of "Shirkina Sundried Sidamo" and filed a suit against the Ethiopian

governments claims to register "Sidamo" as a trademark.<sup>1</sup> The case ignited worldwide protests against the company under the leadership of Oxfam America.<sup>2</sup> Under the pressure of bad publicity, Starbucks dropped its claim for the trademark and finally signed the agreement in 2007. This high-profile case created support for Ethiopian coffee and its farmers, however it is not clear how the Initiative is affecting the prices of the trademarked coffees. An analysis of whether and to what extent the export prices have been affected by this Initiative and publicity will improve our understanding of the roles of different schemes to protect intellectual property. It will also shed light into the question of whether trademarks are a viable tool to help poor farmers benefit from the increasing trade in specialty products from developing countries.

In Section 1, we present an overview of the global coffee market with special focus on Ethiopia. In Section 2, we describe the dispute that lead to the publicity campaigns to support the Trademarking and Licensing Initiative, and the reasons why the Ethiopian Government chose trademarks to protect these coffees. We describe the data and present some descriptive statistics in Section 3 and present the results of our empirical analysis in Section 4. We conclude in Section 5 with policy recommendations.

# 1. World Coffee Market

Ninety percent of world coffee is produced in developing countries, whereas most of it is consumed by developed countries. World production of coffee in 2008 was 7.6 million metric tons, 60% of which was produced by the top four producing countries, i.e. Brazil, Vietnam, Colombia and Ethiopia (ICO). <sup>3</sup> Similar to other primary commodities, coffee prices are highly volatile and show periods of high prices followed by oversupply and low prices (Daviron & Ponte, 2005). The international Coffee Agreement (ICA) played a role

<sup>&</sup>lt;sup>1</sup>The name of the "Sidama" region is subject to political debate. We use the name "Sidamo" when referring to the legal procedure that explicitly was about that term. In the rest of the article we use "Sidama" in keeping with current practice: http://sidamatimes.blogspot.com/2007/10/worldwide-campaign-to-stamp-out-sidamo.html

<sup>&</sup>lt;sup>2</sup>To read more about the Oxfam campaign see: http://www.oxfamamerica.org/whatwedo/campaigns/coffee/news\_publications/starbucks-campaign-anatomy-of-a-win

<sup>&</sup>lt;sup>3</sup>International Coffee Organization, Total Production of Exporting Countries: http://www.ico.org/prices/po.htm.

in stabilizing prices but since its expiration in 1989, prices have been more volatile. In 2002, real coffee prices were at their lowest level in a century which was termed "the coffee crisis."

Producing countries liberalized their domestic coffee sectors to varying degrees after the expiration of ICA. Ethiopian coffee market has also undergone liberalization efforts, especially following the fall of the Derg regime in 1991. The reforms reduced the role of government in coffee marketing, increased the role of private exporters, and allowed for direct exports of coffee through farmers' cooperatives (Gemech & Struthers, 2007). Previous research shows that these reforms increased the price volatility and price transmission from World market to domestic market in Ethiopia (Gemech & Struthers, 2007; Worako  $et\ al.\ , 2008$ ).

During the period of domestic reform in producing countries, the "coffee paradox" was in the making in the world coffee market. Daviron & Ponte (2005) define the coffee paradox as the coexistence of a coffee price crisis in producing countries with a coffee price boom in consuming countries. The main reason underlying the coffee paradox is identified as the change in the value chain structure from a producer driven to a consumer driven chain. Most of the value is now added in consuming countries by roasters and retailers, hence decreasing the share captured in producing countries.

Producing countries that have a potential to add intangible value to their coffees have attempted to take advantage of this shift in emphasis by consumers. The demand for specialty coffees, e.g. organic, fair trade, bird friendly and single origin, had been increasing in spite of the stagnant overall demand. Ethiopian coffee has always received a price premium in international markets due to its fine quality (Teuber, 2007). Ethiopian coffees receive consistently more than 90 points in international tastings.<sup>4</sup> Especially Sidama, Yirgacheffe and Harar coffees have been sold in the retail market for up to US\$26 per pound, while farmers receive around US\$1.50 for the same coffee (ECN, 2009). The Ethiopian government's Trademarking and Licensing Initiative is a step towards capturing more of

 $<sup>^4\</sup>mathrm{Coffee}$  Review: http://www.coffeereview.com/allreviews.cfm?find=ethiopia.

this value in Ethiopia and thereby increasing the incomes of the millions of smallholder producers.

#### 2. Trademarking Initiative and Starbucks Case

The Ethiopian government applied to the U.S. Patent and Trademark Office (USPTO) to register the names of Sidama, Yirgacheffe and Harar coffees as trademarks in March 2005. Starbucks, however, had an already ongoing application to trademark "Shirkina Sun-Dried Sidamo" and refused to drop its claim to clear the road for the Ethiopian government's Initiative (Faris, 2007). The Ethiopian government appealed to USPTO to block the application from Starbucks, which dropped its claim in July 2006 but still did not sign the Trademark license agreement. This dispute ignited a big public campaign by Oxfam America, which was publicized in NPR, the BBC, CNN, Time, Fortune, and The Wall Street Journal and created pressure on Starbucks (Perera, 2007). This global campaign urged Starbucks to sign the licensing agreement. Oxfam International declared December 16, 2006 as the "Starbucks Day of Action" encouraging people to request from Starbucks that it signs the agreement to honor its commitments to improve the lives of poor coffee farmers it buys coffee from. Around 100,000 people had contacted Starbucks by the end of the Oxfam campaign and Starbucks finally signed the agreement in June 2007. Meanwhile, the Specialty Coffee Association of America (SCAA) protested the registration of Sidamo as a trademark and suggested that Ethiopian coffee should rather be protected with Geographical Indicators. The USPTO kept refusing the registration of Sidamo until February 2008, when the registration was complete after detailed evidence from the government of Ethiopia showing that the geographic term had "acquired distinctiveness" making it eligible for a trademark protection (Rotstein & Christie, 2009). As of August 2009, the three coffee names were registered in 29 countries and more than 90 companies had signed the agreement (Belete, 2009).

Trademarks vs Geographical Indicators. In order to capture more of the value of the single origin coffees in producing countries some form of intellectual property tool must be used. Geographical designations can be protected by trademarks or geographical indicators, both of which have different benefits and costs in different settings (Schuessler, 2009). trademarks are traditionally owned by a particular enterprise, whereas geographical indicators can be used by anyone who complies with the standards. Schuessler (2009) defines the main distinction between trademarks and geographical indicators as the fact that trademarks identify the producer of a product or service, geographical indicators identify the place of origin and characteristics that derive from that origin. For the case of Ethiopian Trademarking and Licensing Initiative, however, this distinction is blurred since the trademark identifies the place of origin and characteristics, and it is owned by the government itself rather than a private enterprise.

Ethiopian government justifies the novel choice of trademarks as a tool to protect the geographical designations of its coffees with two main claims. First, the main goal of the Trademarking Initiative is stated as "gaining more control over the market" and geographical indicators are assumed to give not as much control to their owner as trademarks do. <sup>5</sup> Second, the Ethiopian coffee sector is characterized with more than one million smallholder producers on over four million small plots which would make registering and enforcing geographical indicators very difficult and costly (Rotstein & Christie, 2009).

Consequently trademarks were chosen over geographical indicators, which was the main reason behind the conflict between the Ethiopian government, Starbucks and the SCAA. The government is currently planing to extend the trademarks to two more coffee origins. Before an extension is implemented, it is essential to understand how the existing Initiative and the Starbucks publicity affected the prices of these coffees. One of the main goals of Ethiopian government was to improve the incomes of its small-scale coffee farmers. There is anecdotal evidence that the Initiative is making improvements in the lives of farmers in villages, however there is no quantitative study that supports this claim. Ideally the effect of the Initiative on farmers' livelihoods should be studied using farmer level panel data from regions covered by the trademark and those that are not. However, given the fact that any

<sup>&</sup>lt;sup>5</sup>Schuessler (2009) mentions that while this may be true in many markets, in the US both trademarks and geographical indicators can provide similar levels of control all the way down to the retail level.

program needs to affect the export prices before its effects can reach farmers, our study is a first step in understanding the effects of the Initiative on the prices of trademarked coffees.

#### 3. Data and Descriptive Statistics

We analyze the historical price development of all types of Ethiopian coffee to identify whether and how Trademark Initiative and Starbucks publicity affected the prices of Sidama, Yirgacheffe and Harar coffees vis-á-vis coffees of other origins using data from the Ethiopian Customs Department collected by the first author during a field trip to Ethiopia in March 2009.<sup>6</sup> The data include the price, origin, grade and certification status of all coffee shipments (around 24,000 data points) from November 2004 to February 2009. We also use data from the International Coffee Organization (ICO), which publishes data on global production, trade and prices of arabica and robusta coffees from all producing and consuming countries.<sup>7</sup> These data, however, do not differentiate between grades or specific origins of coffees within producing countries. Therefore, we use ICO data only to provide a general overview of the global coffee market.

Figure 1 shows the producer prices in Brazil, Colombia, Ethiopia and Uganda (all arabica producers) as a percentage of the daily average prices in New York and German markets since 2004. Producers' prices in Brazil have been between 80 to 90% and Colombian producer prices have been around 80% of the average ICO price. Ugandan producers' prices have been around 50% of the ICO price with a slight upward trend. The Ethiopian producers' prices show a higher volatility and have decreased from around 70% to under 60% with two brief hikes at the end of 2006 and 2007.

These figures however do not tell us much about the share of the producers' prices in the final retail price. Daviron & Ponte (2005) show that the farm gate price in Uganda is around 7% of the retail price along the Uganda-Italy supermarket value chain (pp.208). Light Years IP found that Ethiopian farmers were receiving around 6% of the final retail

 $<sup>^6</sup>$ We thank to Mohammad Garad from the Light Years Intellectual Property (LYIP) for his support in obtaining this data.

<sup>&</sup>lt;sup>7</sup>ICO: http://www.ico.org/about\_statistics.asp.

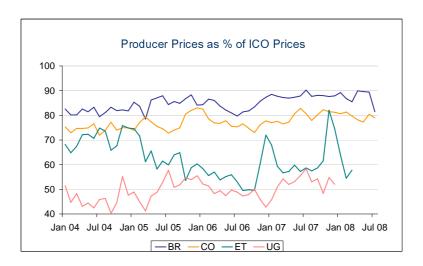


FIGURE 1. Producer prices as % of ICO Brazilian Naturals prices in selected arabica producing countries

price before the start of the Trademarking Initiative (LYIP, 2008). The main reason behind the difference between the producer share of ICO prices and final retail prices is the fact that most of the value to coffee is added by roasters and retail outlets in consuming countries. Especially for countries with high quality coffees like Ethiopia, the difference between the import and retail prices may be very high. Starbucks was selling Shirkina Sun-Dried Sidamo for US\$26 per pound, while the ICO prices were around one dollar per pound for Brazilian Naturals. This big discrepancy motivated the Ethiopian government to establish the Initiative in order to capture more of the retail value within the country. The government believes that most of this value is created in the regions where these coffees are grown – otherwise roasters would have been able to create the same value for other coffees of different origin as well.

In order to understand the effects of the Initiative on coffee prices, one needs to differentiate between different origins, grades (Ethiopian export coffee is graded from 1 to 5) and certification status (e.g. organic, fair trade...etc.). The ICO data does not cover these important determinants of coffee prices. The Ethiopian Customs data include detailed

<sup>&</sup>lt;sup>8</sup>Ethiopian coffee is classified under the Brazilian Naturals group along with Brazil and Paraguay in ICO statistics.

information and allow us to control for all these characteristics that affect the price of coffee.

Almost all commercial coffee production in Ethiopia takes place in two main regions: Oromia and Southern Nations and Nationalities (SNNP). Sidama and Yirgacheffe are in SNNP, while Harar is in Oromia region.<sup>9</sup> The three trademarked coffees make up around 43% of total exported coffee registered by the Ethiopian Customs, and Sidama alone is around 30% of the total (Table 1).

Table 1. Percentages of trademarked and non-trademarked coffee volumes in total exports

Year	Sidama	Yirga.	Harar	Non-TM
2004	32.6	4.5		63.0
2005	32.2	5.4	4.7	57.7
2006	29.4	3.9	9.7	56.9
2007	33.0	4.9	8.8	51.8
2008	26.4	4.6	8.2	59.4
2009	19.5	3.1	11.4	65.5
Total	29.9	4.7	8.5	56.8

Source: ICO Data and authors' calculations from

Customs data.

Table 2 shows the prices of the three trademarked coffees and the non-trademarked coffees exported from Ethiopia relative to the ICO prices of Brazilian Naturals. In spite of stagnant price levels for Brazilian Naturals in international markets and non-trademarked Ethiopian coffee, the prices of trademarked coffees increased consistently, especially after 2005. Relative to the ICO prices, the non-trademarked coffee prices have been declining, while the trademarked coffee prices have been constantly increasing since 2004.

These observations, however, are based on unconditional means only and do not necessarily represent the effect of the initiative on prices. During the same period, the international demand for specialty coffees such as organic, fair trade or bird friendly coffees increased

<sup>&</sup>lt;sup>9</sup>Sidama is the name of a region; Yirgacheffe is the name of a village in Sidama with special agro-ecological conditions; and Harar is the name of a city. These different definitions of the origins of trademarked coffees created confusion during the registry process of trademarks (Garad, 2009).

Table 2. Ethiopian customs prices relative to ICO Brazilian Naturals prices

Year	Non-TM	Sidama	Yirgacheffe	Harar
2004	1.02	1.01	1.28	
2005	1.01	1.05	1.29	1.24
2006	1.01	1.18	1.55	1.15
2007	0.98	1.19	1.64	1.26
2008	0.98	1.23	1.66	1.26
2009	0.98	1.45	1.90	1.38

 $Source\colon$  Authors' calculations using ICO and Ethiopian Customs data.

(Bacon et al., 2008). The increase in prices may be a result of a proliferation of certification programs or an increase in quality unrelated to the Initiative. In what follows we analyze the price data from Ethiopian Customs to control for other variables to isolate the impact of the Initiative and publicity on the prices of the three trademarked coffees.

### 4. Empirical Analysis

The main goal of the econometric analysis is to identify whether the Trademarking Initiative and the related publicity have coincided with an increase in the prices of the trademarked coffees as opposed to other Ethiopian coffees. For illustrative purposes, we first estimate the monthly price premiums for all origins running the following regression separately for each month:

$$log(P_i) = \alpha_1 \text{Sidama} + \alpha_2 \text{Yirgacheffe} + \alpha_3 \text{Harar} + \beta \mathbf{O}^{-TM} + \gamma \mathbf{G} + u_i.$$
 (1)

Sidama, Yirgacheffe and Harar are dummy variables identifying the trademarked coffees,  $\mathbf{O}^{-TM}$  is a vector of dummies for coffee origins that are not trademarked (including unknown origin),  $\mathbf{G}$  is a vector of grade dummies identifying grades from undergrade to grade 4 (grade 5 is the reference category) and i indicates each transaction in the data set. We exclude organic and fair trade certified coffees that constitute less than 1% of the total coffee exports in order to prevent convoluting the price effect of these standards with that of the trademark.

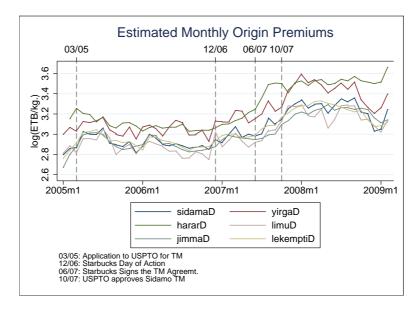


FIGURE 2. Estimated origin premiums for each month and the landmarks of the publicity of the Trademark Initiative

Figure 2 shows the premiums of trademarked ( $\alpha_{1,2,3}$ ) and a selection of non-trademarked coffees estimated using the monthly cross-sectional regressions in equation 1.<sup>10</sup> The dates of important steps of the trademark process and the publicity are also marked (i.e. of Ethiopian government's application to USPTO in March 2005, Oxfam's "Starbucks Day of Action" in December 2006, Starbucks' signing of the Trademark and Licensing Initiative in June 2007 and the USPTO's approval of the Sidamo trademark in October 2007). The price premia in figure 2 are not affected by any other developments in the national and international coffee markets that affected all Ethiopian coffee equally. We can see that the prices of the trademarked coffees were moving closely with the prices of other coffees before the Starbucks Day of Action (12/06). After this date there seems to be an increasing divergence between trademarked and non-trademarked coffees.

Based on this observation, we identify the Starbucks Day of Action and Starbucks' signing of the Initiative as potential structural break points in our further analysis of prices over time. In order to identify whether these interventions caused a significant increase

 $<sup>^{10}</sup>$ Dependent variable is the logarithm of price per kilogram in Ethiopian Birr (ETB).

in the prices of trademarked coffees as compared to other coffees, we run the following regression:

$$log(P_{it}) = \alpha \operatorname{Oxfam}^* \mathbf{TM} + \beta \operatorname{Starbucks}^* \mathbf{TM} + \gamma \mathbf{O} + \sigma \mathbf{G} + \delta \mathbf{V} + \eta \mathbf{T} + \mu \mathbf{TO} + \nu \frac{1}{w_{it}} + u_{it}.$$
(2)

Oxfam and Star are dummy variables that equal one if the transaction occurred after December 2006 and June 2007, respectively. **TM** is a vector of three dummy variables for trademarked coffees (i.e. Sidama, Yirgacheffe and Harar), **O** is a vector of origin dummies including the most common coffee origins in the data and **G** is a vector of grade dummies.<sup>11</sup> We control for the supply effect by including a variable that is equal to the percentage of the total coffee sold in a given month from each origin (**V**). In order to better identify the main coefficients of interest, i.e.  $\alpha$  and  $\beta$ , we also include monthly dummies (**T**) to control for any aggregate coffee price movements and month-origin interactions (**TO**) to control for origin-specific seasonality. Finally, we include the inverse of the physical weight ( $w_{it}$ ) of each transaction to control for fixed costs and transaction costs of exporting each batch of coffee. Table 3 presents the results for the main coefficients of interest in equation 2.

Table 3. OLS coefficients of variables of interest

Variable	Coefficient	Robust SE	t-value
Oxfam*Sidama	0.067	0.006	13.31
Oxfam*Yirgacheffe	0.116	0.011	11.53
Oxfam*Harar	0.045	0.011	5.31
Starbucks*Sidama	0.001	0.005	0.20
Starbucks*Yirgacheffe	0.017	0.011	1.57
Starbucks*Harar	0.114	0.010	13.08

Source: Authors' calculations from Customs data.

Interestingly, the intervention dummies all have positive coefficients, indicating that the prices for the trademarked coffees diverged from the non-trademarked coffees after the Oxfam and Starbucks interventions. For statistical tests of any reasonable size, it is easy to reject the null hypothesis that there was no change for four of the coefficients, and an

 $<sup>^{11}</sup>$ We grouped origins that have very small number of observations in the data with the "Other" group.

F test easily rejects the null hypothesis that all of these coefficients show no divergence at or near these dates; the p-value was vanishingly small. Furthermore F tests easily reject the null hypotheses that all three Oxfam coefficients or that all three Starbucks coefficients equal zero. Across both break dates, these origins rise in relative price by about 7% for Sidama, 14% for Yirgacheffe, and 16% for Harar.

The Oxfam and Starbucks break dates are close together with few observations between them, so it is difficult to precisely estimate which intervention is associated statistically with which portion of the price increase. Regressions with just Oxfam dummies or just Starbucks dummies yield similar results when compared with the sums of these interventions estimated here. The exact break date does not matter for this exercise, though a comparison of the weighted variance of the residuals reveals that the Oxfam-only specification has a lower variance (0.01182 versus 0.01186). Although the initial court case was over the name of "Sidama" only, the Oxfam campaign did not single out one variety, rather they profiled "poor Ethiopian coffee farmers" against the "corporation." The Oxfam variables seem to capture the main effect of this dispute and publicity on prices of all trademarked coffees. These findings are robust across different specifications with different regression weights (such as weighting each observation equally) as well. It is impossible to firmly establish that the interventions caused this relative price change, but the rough magnitudes of the relative price changes after 2007 are robust features of the data.

Table 4 compares the actual prices of trademarked coffees with the estimated relative price changes following the Oxfam and Starbucks campaigns. It is known that Ethiopian coffee origins have been differentiated for a long time and receive single origin premia in international markets (Teuber, 2007). Estimating a price effect that is compatible with these long established origin premiums with a trademark and international publicity can be done with these data. Kodama (2007) reports that farmers in Yirgacheffe received 1.4-2.6 ETB per kg. for their dry coffee in 2006, and 0.1-0.2 ETB as dividends from their cooperatives. The price effects that we identify are significant when compared with these numbers. To compare the effects of these interventions to these numbers, we calculated the average price of these varieties in the year 2006. Then we use the regression estimates to

see what the price of these varieties would have been in year 2006 had the post-intervention price divergence already occurred by then.

Table 4. Actual and counterfactual prices with campaign effects (ETB/kg.)

	2006 Price	2006 Price	
	(Actual)	(Counterfact.)	Difference
Sidama	22.32	23.90	1.58
Yirgacheffe	29.21	33.39	4.18
Harar	21.64	25.37	3.73

The differences between the actual price and counterfactual price are of the same order of magnitude as what the farmers themselves receive. How much of the premium generated by the Trademarking and Licensing Initiative (and the ensuing publicity) flows to farmers, however, is a different question that cannot be answered with our data. Answering this question would require hard data on what has happened with farmers' share of export prices.

Complicating the analysis, the Ethiopian government has been restructuring the coffee trade drastically in the last couple of years. The introduction of coffee trade in the Ethiopian Commodity Exchange (ECX) in December 2008 has created very different views from different market participants. The ECX strives to increase transparency and improve price discovery closer to the farmers via local trading centers (ECX, 2008). Price discovery should improve farmers' share of the retail price as opposed to the current system where farmers do not have the opportunity of finding out the quality of their coffee when they sell it to traders. In spite of its flexible system intended to accommodate very detailed grade and origin groups, the ECX has come under pressure from international specialty coffee traders who wanted to buy directly from farmers to ensure traceability (Mezlekia, 2009). The ECX recently introduced the Direct Specialty Trade where international buyers directly buy from small coffee cooperatives with a requirement that farmers receive a minimum of 85% of the final export price (ECX, 2010). Prices on the first day of trading ranged between US\$2.15-4.02, which would constitute a significant increase for farmers if

they really receive the stated share.<sup>12</sup> These developments combined with the Trademark Initiative are intended to increase farmers' share of the retail price, though detailed analyses tracking farmer incomes over time are required to see whether they will be able to do so.

### 5. Conclusions and Policy Recommendations

We analyze the change in origin premia following Ethiopian Trademarking and Licensing Initiative and the international publicity it created, using data on the export prices of Ethiopian coffee. We use detailed data from the Ethiopian Customs Department that records every coffee transaction in detail including origin, grade and certification status. Oxfam organized an international campaign in response to Starbucks' refusal to sign the Trademarking Initiative, which created significant global publicity and awareness of the poverty among the millions of Ethiopian coffee farmers. We find that the Oxfam campaign was followed by an economically significant price increase in the trademarked coffees (Sidama, Yirgacheffe and Harar) which is comparable to the farm gate price of coffee in the region reported in other studies, though it will take more work to see if this has materially affected farmers' share of income from the coffee value chain. If farmers receive the same share of export income as they did before, then these relative price changes have translated to income increases on the order of seven to sixteen percent.

Compared to other government Initiatives like the Direct Specialty Trade at the ECX, the effects of the Trademarking and Licensing Initiative and the publicity seem fairly small. In the absence of an international outcry like the Starbucks case created, it may be hard to create a significant impact with the silent registration of trademarks in importing countries. The efforts to increase demand for Ethiopian coffee through trademarking need to be coupled with other interventions to increase the prices significantly. These initiatives alone will not be enough, however, to achieve the Ethiopian Government's laudable goal of improving the welfare of its millions of small-scale coffee farmers. An improved local market

 $<sup>^{12} {</sup>m http://www.addisfortune.com}$ 

structure should be supported with improved extension services targeted to quality management and marketing to achieve this goal. Future studies need to focus on rigorous data collection and direct analysis of farmers' welfare in order to identify the best approaches of improving the welfare of the producers of these specialty coffees in a fast changing local and international coffee market.

#### References

- Bacon, C. M., Mendez, V.E., & Fox, J.A. 2008. Confronting the coffee crisis: fair trade, sustainable livelihoods and ecosystems in Mexico and Central America. Cambridge, Mass.: MIT Press. Chap. Cultivating Sustainable Coffee: Peristent Paradoxes, pages 337–372.
- Bastin, Anne, & Matteucci, Nicola. 2007 (March). Financing Coffee Farmers in Ethiopia: Challenges and Opportunities. In: International Conference on Rural Finance Research: Moving Results into Policies and Practice.
- Belete, Wondwossen. 2009 (August). Personal Communication.
- CSA. 2008. Annual Statistics, Section D: Agriculture. Central Statistical Agency of Ethiopia.
- Daviron, Benoit, & Ponte, Stefano. 2005. The Coffee Paradox: Global Markets, Commodity Trade and the Elusive Promise for Development. London and New York: Zed Books.
- ECN. 2009. Ethiopian Coffee Network. http://www.ethiopiancoffeenetwork.com/about3.shtml.
- ECX. 2008 (December). What is in a bean? ECX and the Specialty Coffee Market. Ethiopian Commodity Exchange, Discussion Note.
- ECX. 2010 (February). Direct Specialty Trade. Ethiopian Commodity Exchange. http://www.ecx.com.et/downloads/whatsNew/DST
- Faris, Stephan. 2007 (February). Starbucks vs. Ethiopia. Fortune Magazine.
- GARAD, MOHAMMED. 2009 (March). Personal Communication, March 2009, Addis Ababa.
- Gemech, Firdu, & Struthers, John. 2007. Cofee Price Volatility in Ethiopia: Effects of Market Reform Programs. *Journal of International Development*, **19**, 1131–1142.
- Kodama, Yuka. 2007. New Role of Cooperatives in Ethiopia: the Case of Ethiopian Coffee Farmers Cooperatives. *African Study Monographs*, 87–109.
- Kurata, Philip. 2008 (May). Ethiopian Coffee Brands Go Global, Wake Up Local Economy. http://www.america.gov/st/econ-english/2008/May/20080430152915cpataruk0.9959528.html.
- LABOUISSE, JEAN-PIERRE, BELLACHEW, BAYETTA, KOTECHA, SURENDRA, & BERTRAND, BENOIT. 2008. Current status of coffee (Coffea arabica L.) genetic resources in Ethiopia: implications for conservation. *Genetic Resources and Crop Evolution*, **55**, 1079–1093.
- LYIP. 2008. Scoping Study: Ethiopian Fine Coffee. http://www.lightyearsip.net/scopingstudy/coffee.html.
- MEZLEKIA, WONDWOSSEN. 2009 (October). Window dressing of Ethiopia's coffee exchange. Ethiopian Review. http://www.ethiopianreview.com/content/11037.

- Perera, Andrea. 2007 (December). Starbucks Campaign: Anatomy of a Win. http://www.oxfamamerica.org/articles/starbucks-campaign-anatomy-of-a-win.
- ROTSTEIN, FIONA, & CHRISTIE, ANDREW, F. 2009 (May). Sidamo: A Teaching Case for World Intellectual Property Organization (WIPO). Tech. rept. WIPO Worldwide Academy.
- Schuessler, Lennart. 2009. Protecting Single-Origin Coffee within the Global Coffee Market: The Role of Geographical Indications and Trademarks. The Estey Centre Journal of International Law and Trade Policy, 10(1), 149–185.
- TEUBER, RAMONA. 2007 (March). Geographical Indicators of Origin as a Tool of Product Differentiation: The Case of Coffee. In: 105th EAAE Seminar: "International Marketing and International Trade of Quality Food Products".
- WORAKO, T.K., VAN SCHALKWYK, H.D., ALEMU, Z.G., & AYELE, G. 2008. Producer price and price transmission in a deregulated Ethiopian coffee market. *Agrekon*, **47**(4), 492–508.